ATTACHMENT B

Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

1-31. (Canceled).

32. (Currently Amended) A method of synchronizing the local clocks of each of a plurality of USB devices connected to a common USB host via a USB tree so that said clocks are in phase and at a common frequency, comprising:

(a) locking the local clock of each of said USB devices comprising:

generating or designating specific signal structures for transmission in the USB data traffic;

transmitting said specific signal structures to said USB device in a predefined sequence;

monitoring USB signals local to said USB device for said specific signal structures;

generating a local reference signal at each of said USB devices from said specific signal structures; and

locking the frequency of said local clock signal at each of said USB devices to said local reference signal to a predetermined degree;

(b) determining the relative propagation ~~delay~~time of signals from said USB host to each of said USB devices with respect to a selected ~~one of said~~reference USB ~~devices~~device, comprising:

designating a master USB device in said USB tree for monitoring traffic to and from each of said USB devices;

generating or designating specified signal structures for transmission in the USB data traffic;

transmitting said specified signal structures to each of said USB ~~device~~devices in a predefined sequence;

monitoring said USB traffic ~~by means of~~with said master USB device for

said specified signal structures and for specified response signals from said USB device;

generating first event triggering signals local to said master USB device corresponding to decoding of said specified signal structures;

generating second event triggering signals local to said master USB device corresponding to decoding of response signals from said USB device;

measuring a time interval between said first and second event triggering signals in said master USB device; and

determining a propagation time from said master USB host to each of said USB ~~device~~devices from said time ~~interval~~intervals~~, said selected one of said USB devices designated a reference USB device~~; and

determining the relative propagation time for each of said USB devices with respect to said reference USB device by determining the difference in said propagation time between said reference USB device and each of USB devices; and

(c) ~~determining the relative phase~~adjusting the phase of said local clock of each of said plurality of USB devices with respect to said local clock of said reference USB device comprising:

~~determining respective propagation delays between each of said USB devices;~~

determining the temporal adjustment or phase offset of each of said local clocks required to result in said plurality of local clocks across said USB tree being in phase;

transmitting said temporal adjustment or phase offset from said USB host to said USB devices; and

providing phase adjustment of said local clock on each of said USB devices according to said temporal adjustment or phase offset respectively.

33. (Currently Amended) A method as claimed in claim 32, wherein each of the local clocks of at least some of said USB devices are shifted in phase by a desired amount~~, resulting in an array of USB devices with local clocks of known relative phases~~.

34. (Currently Amended) A method for synchronously triggering and thereby initiating or stopping one or more processes on a plurality of USB devices connected to a common USB host according to a predefined trigger command, comprising:

synchronizing the local clocks of each of said USB devices according to the method of claim 32;

transmitting a predetermined trigger request signal and a predetermined trigger command signal in the USB data traffic, indicative respectively of a trigger request and of said trigger command;

monitoring said USB data traffic local to each of said USB devices for said trigger request signal and for said trigger command signal;

sending an initiating trigger request signal ~~by means of~~with said USB host to each of said USB devices to prepare said USB devices to execute said trigger request at a common time;

configuring said USB devices to respond to said initiating trigger request signal by ~~preparing~~configuring themselves to perform said processes ~~on~~upon receipt of said trigger command signal;

configuring said USB host to issue said trigger command to each of said plurality of said USB;

decoding said trigger command ~~by means of~~with said USB devices;

configuring said USB devices to execute said processes at a common time; and

whereby one or more processes within said USB devices can be initiated or stopped upon receipt of said trigger command signal from said USB host.

35. (Currently Amended) A method as claimed in claim 34, wherein said trigger request signal comprises ~~any of the~~a USB packet signal ~~structures defined in the USB specification~~structure, any of the command sequences sent to the USB ~~device~~devices, or any of the data sequences sent to the USB ~~device~~devices.

36. (Original) A method as claimed in claim 34, including transmitting said trigger request signal and said trigger command signal in a predetermined sequence.

37. (Currently Amended) A method as claimed in claim 34, wherein said trigger command signal comprises ~~any of the~~a USB packet signal ~~structures defined in the USB specification~~structure, any of the command sequences sent to the USB ~~device~~devices, or any of the data sequences sent to the USB ~~device~~devices.

38. (Currently Amended) A method as claimed in claim 34, wherein each of said USB devices includes a local USB decoding device ~~is~~, said local USB decoding device comprising a microcontroller, a microprocessor, a field programmable gate array or any other element capable of decoding data structures within each of said USB devices.

39. (Original) A method according to claim 34, wherein said trigger request signal comprises OUT tokens, IN tokens, ACK tokens, NAK tokens, STALL tokens, PRE tokens, SOF tokens, SETUP tokens, DATA0 tokens, DATA1 tokens, or programmable sequences bit patterns in the USB data packets.

40. (Original) A method according to claim 34, wherein said initiating trigger request signal comprises OUT tokens, IN tokens, ACK tokens, NAK tokens, STALL tokens, PRE tokens, SOF tokens, SETUP tokens, DATA0 tokens, DATA1 tokens, or programmable sequences bit patterns in the USB data packets.

41. (Original) A method according to claim 34, wherein said trigger command is encoded into said USB traffic using a signal protocol defined within the USB specification.

42-50. (Canceled)